Please note: the statements on this page reflect the state of affairs at the time of the First Annual IMAP Meeting in early 1996. The IMAP Connection, however, contains regularly updated status, documentation, and implementation information on IMAP.

IMAP: The Internet Message Access Protocol

Brief Overview and History

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IMAP: What is it?

1. A client/server protocol for manipulating remote message stores.
2. Part of the Open Internet Messaging Architecture:
   - ESMTP mail transport
   - NNTP news transport
   - RFC822 & 1036 Header definitions
   - MIME content encoding & labeling
   - IMAP remote mailbox access

IMAP Features

- Support for online, offline, and disconnected operation.
- Selective access to MIME body parts.
- Access to multiple mailboxes, potentially on multiple servers.
- Support for folder hierarchies (i.e. nested mailboxes).
- Standard and user-defined message flags.
- Shared/concurrent access to folders by multiple users.
- Server-based searching and selection.
- Support for advanced authentication techniques.
- Provision for protocol extensibility, e.g. Annotation

IMSP Features

- Companion protocol to IMAP; being developed at CMU
- Ability to map a username/mailbox pair to the correct mail server
- Location-independent access to support files, such as personal address

IMAP Command Summary

- Housekeeping operations: `AUTHENTICATE, LOGIN, LOGOUT, CAPABILITY, NOOP`
- Mailbox operations:`SELECT, EXAMINE, CHECK, CLOSE, EXPUNGE, SEARCH, CREATE, DELETE, RENAME, LIST, LSUB, SUBSCRIBE, UNSUBSCRIBE`
- Message operations: `FETCH, PARTIAL, STORE, COPY, APPEND`

IMAP History & Status

1986: IMAP conceived at Stanford University. Interlisp client and DEC-20 server implemented.
1987: IMAP2 defined; client & server updated. First Unix server implemented.
1988: First IMAP RFC published in July (1064). Initial work on C-Client library.
1989: Crispin hired by U. Washington.
1990: Revised IMAP2 RFC published in August (1176). C-Client based Unix server in November.
1991: MIME support added, forming basis of IMAP2bis. IMAP3 offshoot published in Feb. (since abandoned)
1992: IMAP2bis server deployed by UW. Pine 2.0 released with IMAP support. CMU begins AndrewII/Cyrus project.
1993: IMAP2bis I-D published in August. First VMS server implemented. IETF IMAP Working Group formed.
1994: IMAP4 RFCs published (1730-1733). IMAP4 approved as Proposed Internet Standard.
1995: First IMAP4 server released by CMU. IMAP4 C-Client and server implemented by UW. IMAP Consortium planned.

UW Environment

- Approaching 60,000 user accounts
- 250,000 messages/day
- Peaks above 20,000 msgs/hour
- Need robust/scalable/standards-based client-server email architecture
- IMAP has served us very well

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▷ To First IMAP Meeting

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